

**LISTING OF CLAIMS**

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1-15. (Cancelled)
16. (Previously Presented) A thermal protection system, comprising:  
an insulating core comprising carbon foam produced directly from particulate coal  
having a thermal conductivity below about 1 W/m °K.
17. (Previously Presented) The thermal protection system of claim 16, wherein  
the carbon foam is a coal-based cellular foam.
18. (Cancelled)
19. (Previously Presented) A thermal protection system, comprising:  
an insulating core comprising carbon foam produced directly from particulate coal  
and having a density ranging from about 0.1 to about 0.8 g/cm<sup>3</sup>.
20. (Previously Presented) The thermal protection system of claim 16, wherein  
the carbon foam has a density ranging from about 0.1 to about 0.8 g/cm<sup>3</sup>.